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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,972	08/08/2001	Kiyotaka Ogura	381NT/49741	3582

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EXAMINER

BUI, THACH H

ART UNIT PAPER NUMBER

3752

DATE MAILED: 04/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,972

Applicant(s)

OGURA ET AL.

Examiner

Thach H Bui

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-3, 6, 7, 16 and 17 is/are allowed.
6) ☒ Claim(s) 4, 5, 8, 9, 14 and 15 is/are rejected.
7) ☒ Claim(s) 10-13, 18 and 19 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 is vague and indefinite because "a terminal taking-out window for the electromagnetic coil is formed at a part of the upper portion of the yoke" is not clearly described in the Specification and therefore, renders the claim unclear.

Claim 4 is vague and indefinite because "the electromagnetic coil and the yoke are configured in such a manner as to be fitted around the fixed core from above the fixed core" renders the claim unclear.

Claim 5 is vague and indefinite because "a bore of the upper end of the yoke is drawn" renders the claim unclear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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2. Claims 4-5, 8-9, 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Yokoyama et al. (U.S. Patent No. 5,127,156).

Yokoyama et al. teach an electromagnetic fuel injector in which an electromagnetic coil (27) and a yoke (21) are arranged around a hollow, cylindrical fixed core (22). The fuel injector includes a nozzle body (see Fig. 3) containing therein a needle (14) (see Fig. 1, III) with a valve element is fixed to the lower portion of the yoke, and the needle is urged toward a valve seat (10c) by the force of a return spring (33). The electromagnetic coil and the yoke are configured in such a manner as to be fitted around the fixed core (see Fig. 3) and the yoke (21) can be coupled to the upper end of the nozzle in such a manner as to cover the electromagnetic core (see Fig. 3). The inner surface of the upper end of the yoke presses the electromagnetic coil, thus fixing the coil (see Fig. 3). The inner circumference of the upper end of the yoke is coupled to the outer circumference of the fixed core by any of welding, press-fitting and caulking (indicated as A) (see Fig. 3). Yokoyama et al. further teach a nozzle body having an orifice plate (i.e. an injection orifice) (11) and a fuel swirler (12) of which are formed of separate members. The nozzle includes an inner circumference having a receiving surface for disposing the fuel swirler (12) and the orifice plate i.e. an injection orifice is formed at one end on a fuel injection side of the nozzle body (see Fig. 3). The fuel swirler is loosely fitted to the inner circumference of the nozzle body in such a manner as to be received at the receiving surface of the nozzle body and the orifice plate i.e., an injection orifice is press-fitted and welded to the inner circumference in such a manner as to press the fuel swirler (indicated as B) (see Fig. 3) so that fuel flows into a passage

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groove formed at the lower end surface of the fuel swirler (an annular step at the peripheral edge of one end surface of the fuel swirler) (24) via the annular fuel passage.

Allowable Subject Matter

3. Claims 1-3, 6-7, 16-17 are allowed.
4. Claims 10-13, 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

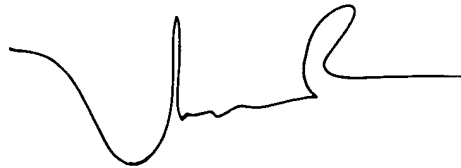
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hamada et al. is cited of general interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thach H Bui whose telephone number is 703-305-0063. The examiner can normally be reached on Monday-Friday, 7:30-4 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on 703-308-2087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Thach H. Bui', with a stylized, flowing script.

Thach H. Bui
Patent Examiner
AU3752